

Seminar notes  
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MITCHELL Model (P-3610)

$$C = 6.47 - .36 OOL + 28.3 C_v - 1.36 VL \\ + .89 FL - .37 M + .09 PD$$

$$\bar{R}^2 = .68$$

## PROVINCE ANALYSIS

$$\hat{I} = 81.9 + 188g + .31p$$

(1.8)                      (2.8)

$$R^2 = .29$$

$$F = 4.6$$

$I$  = household income, 100's VN#

$g$  = gini index

$p$  = population density, km.<sup>-2</sup>

$$\hat{I} = 134 + 41C_v + .30p$$

(1.2)                      (2.6)

$$R^2 = .23$$

$C_v$  = coefficient of variation

$$F = 3.45$$

$C_{vm}$  = " " " (MITCHELL)

$$\hat{I} = 78 + 67C_{vm} + .33p$$

(2.7)                      (3.2)

$$R^2 = .38$$

$$F = 7.1$$

## SIMPLE CORRELATION COEFFICIENTS

	$C_{vm}$	$C_v$	$g$	$p$
$I$	.33	.09	.20	.43



## PROVINCIAL ANALYSIS (N=26)

$$\text{GVN CONTROL} = f(\text{INCOME}, \text{REGIONAL}, \text{HOA HAO}) + e$$

$$\hat{C} = -11.9 + .16 I + .31 D_c I - 37 D_c + .75 HH$$

(2.82)
(2.50)
(-1.55)
(5.43)

$$\bar{R}^2 = .66 \quad F = 13$$

I = MEAN HOUSEHOLD INCOME

## HAMLET ANALYSIS (N=94)

$$\hat{S}_0 = 1.62 + .019 I' + .04 D_c I' - 1.44 D_c$$

(3.25)
(2.41)
(-1.98)

$$R^2 = .25 \quad F = 10.1$$

I' = ADJUSTED PER CAPITA  
INCOME



# DECOMPOSITION OF THE GINI INDEX

QUANG TRI .40 ha. = SUBSISTENCE PLOT

Gini Index = .45 = 2(A+B+C)

SUBSISTENCE COMPONENT = .21

MEAN = .58 ha

AN GIANG

SUBSISTENCE PLOT = .24 ha

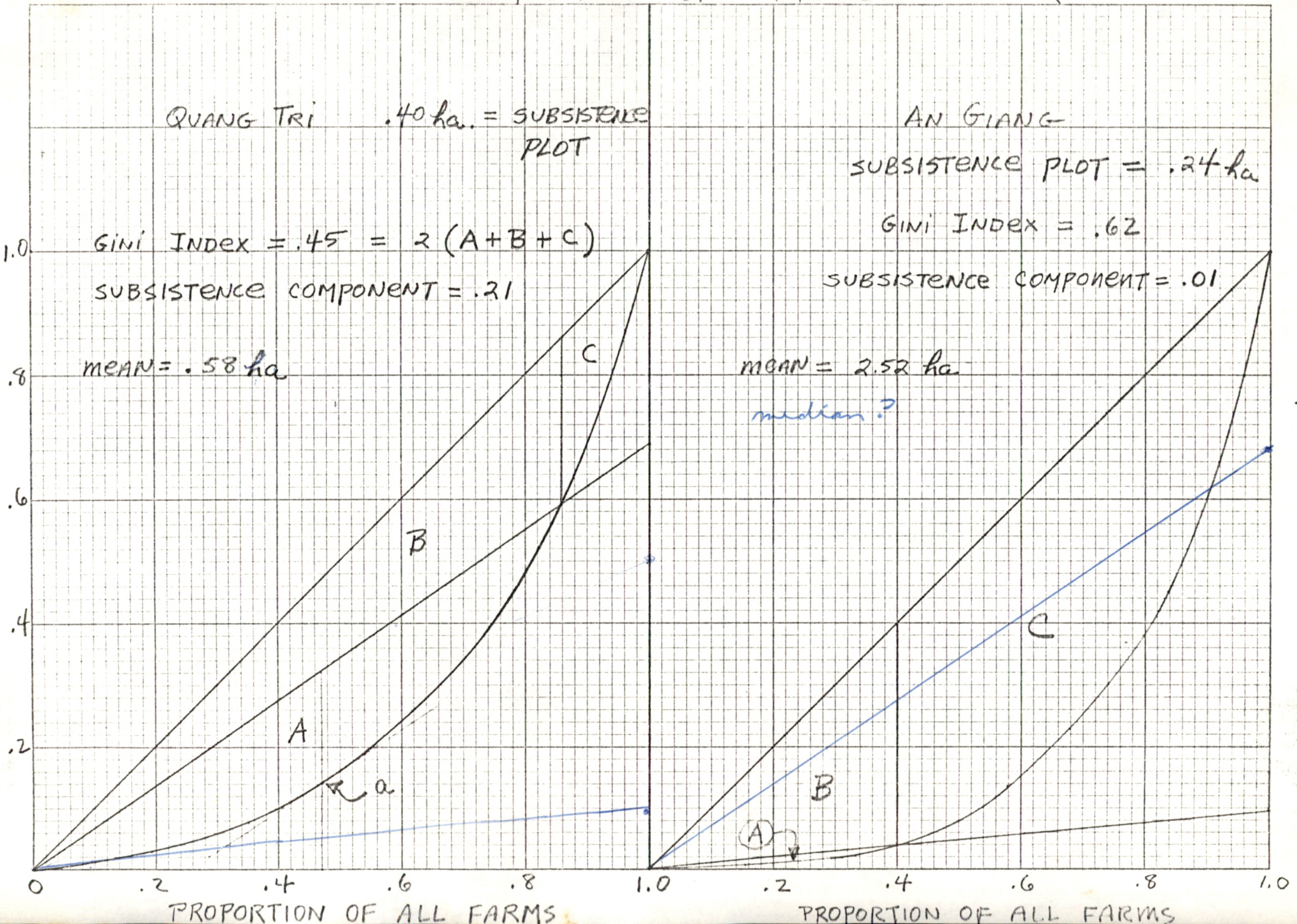
Gini Index = .62

SUBSISTENCE COMPONENT = .01

MEAN = 2.52 ha

median?

PROPORTION OF ALL LAND





5

GVN CONTROL = f (LAND INDEX, REGIONAL, HOA HOA)

$$\hat{C} = -11.2 + 12.8 \frac{\bar{L}}{L_s} - 13.5 \frac{\bar{L}}{L_s} D_s + .71 HH + 44.4 D_s$$

(4.70)      (-4.70)      (4.88)      (3.87)

$$\bar{R}^2 = .65 \quad F = 12$$

GVN CONTROL = f (LAND INDEX, INCOME,  
REGIONAL, HOA HOA)

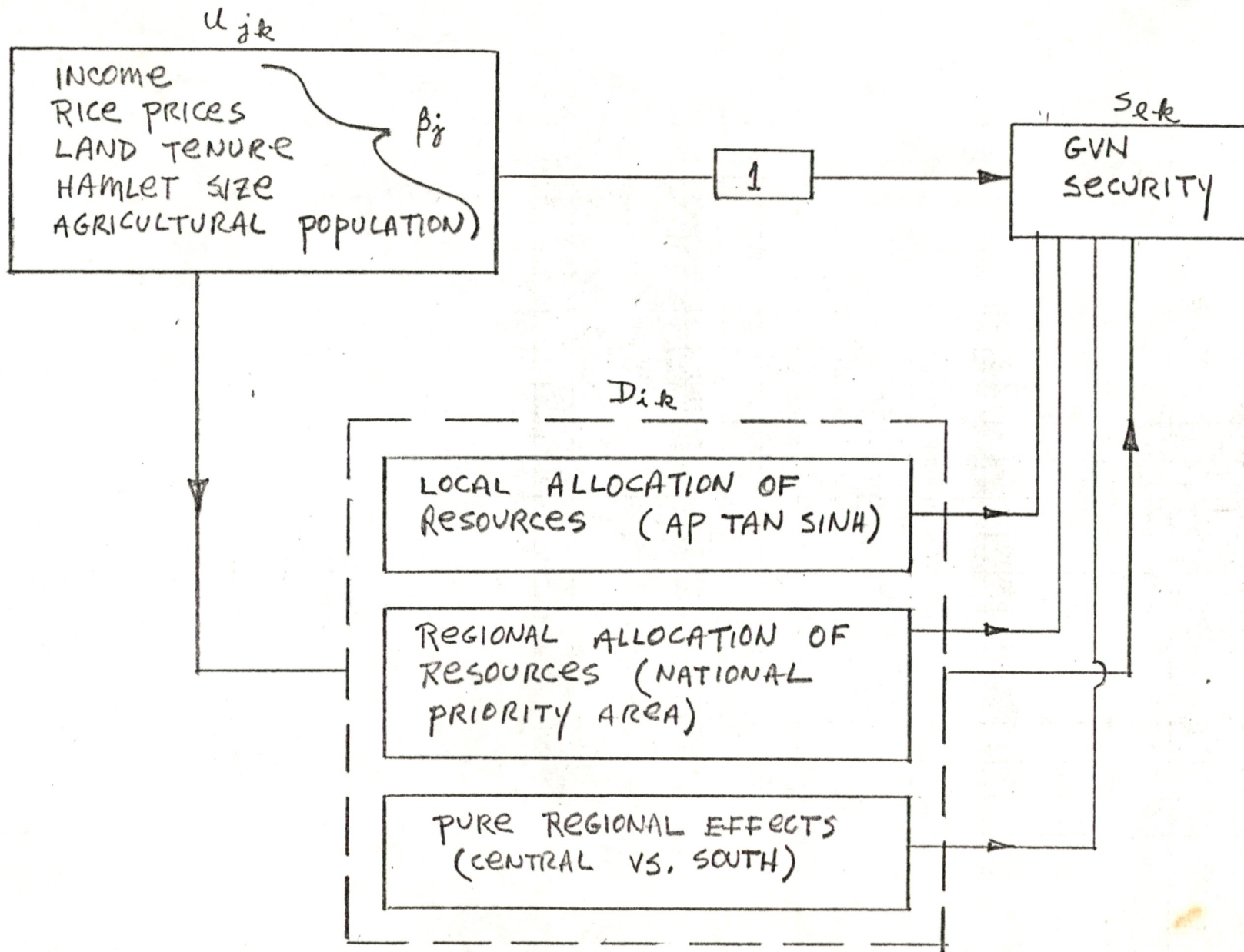
$$\hat{C} = -33.9 + 10.9 \frac{\bar{L}}{L_s} - 10.9 \frac{\bar{L}}{L_s} D_s + .76 HH + 17.3 D_s + .17 I$$

(5.43)      (-5.13)      (7.18)      (1.68)      (4.51)

$$\bar{R}^2 = .82 \quad F = 22.5$$



$$S_{ek} = (1 + D_{ik}) \beta_{ijk} u_{jk} + \epsilon_k$$





$$E(S_{jk}) = \sum_i \sum_j (1 + D_{ijk}) \beta_{ijk} u_{jk}$$

$S_0$  = OVERALL SECURITY INDEX

$$\hat{S}_0 = 2.31 + 1.04 u_1 + .69 u_2 - .31 u_4 - .37 u_5 + .25 u_6$$

(4.35)      (3.89)      (-3.05)      (-3.05)      (2.73)

$$+ D_1 \left[ .37 - 1.09 u_1, -.74 u_2 \right] + D_2 \left[ .43 - .46 u_3 \right]$$

(6.08)      (-4.42)      (-3.62)                      (2.88)      (-2.10)

$$+ .29 D_3$$

(1.48)

$$R^2 = .61 \quad F = 11.52$$

$$\bar{R}^2 = .56$$

$$F_{req'd} @ .01 \approx 2.50$$

	EIGHT HAMLET CLASSES			REGRESSION COEFFICIENTS OF STANDARDIZED VARIABLES						
	$D_1$	$D_2$	$D_3$	CONST.	$u_1$	$u_2$	$u_3$	$u_4$	$u_5$	$u_6$
1	0	0	0	2.31	1.04	.69	0	-.31	-.37	.25
2	0	0	1	2.60	1.04	.69	0	-.31	-.37	.25
3	0	1	0	2.74	1.04	.69	-.46	-.31	-.37	.25
4	0	1	1	3.03	1.04	.69	-.46	-.31	-.37	.25
5	1	0	0	2.68	-.05	-.05	0	-.31	-.37	.25
6	1	0	1	2.97	-.05	-.05	0	-.31	-.37	.25
7	1	1	0	3.40	-.05	-.05	-.46	-.31	-.37	.25
8	1	1	1	3.69	-.05	-.05	-.46	-.31	-.37	.25

$D_1$  = AP. TAN SINH  
 $D_2$  = CENTRAL VN  
 $D_3$  = NAT'L. PRIORITY

$$u_j = \frac{X_j - \bar{X}_j}{\sigma_{x_j}}$$

$X_1$  = CORRECTED PER CAPITA INCOME  
 $X_2$  = NO. LAND OWNERS PER HA. ALL LAND  
 $X_3$  = NO. LANDLESS TENANTS PER HA. ALL LAND  
 $X_4$  = NO. HOLDINGS PER HOUSEHOLD  
 $X_5$  = PRICE OF RICE (LOCAL)  
 $X_6$  = HAMLET POPULATION



$S_1 = \text{HAMLET INFRASTRUCTURE INDEX}$

$$\hat{S}_1 = 2.02 + 1.00 u_1 + .63 u_2 - .28 u_4 - .35 u_5 + .19 u_6$$

(3.54)      (3.04)      (-2.34)      (-2.46)      (1.77)

$$+ D_1 \left[ .32 - .77 u_1 - .89 u_2 \right] + D_2 \left[ .61 - .44 u_3 \right]$$

(4.22)      (-2.66)      (-3.74)      (2.98)      (-1.73)

$$+ .33 D_3$$

(1.45)

$$R^2 = .52 \quad F = 8.06$$

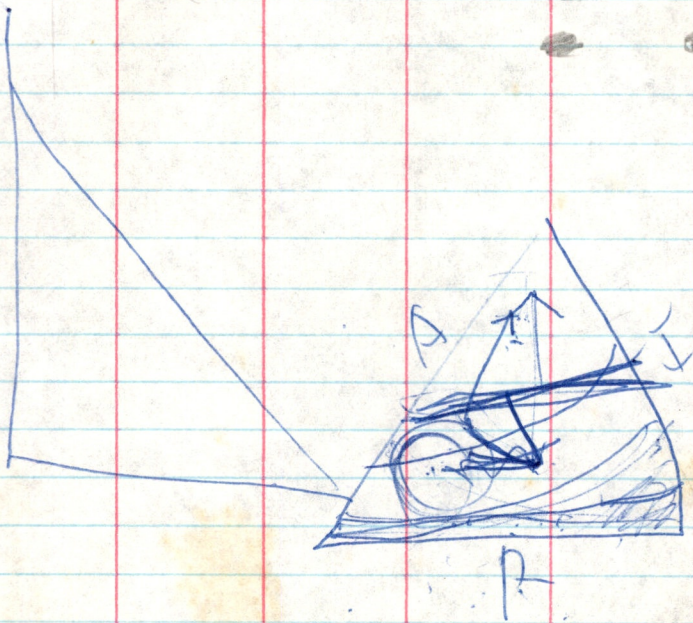
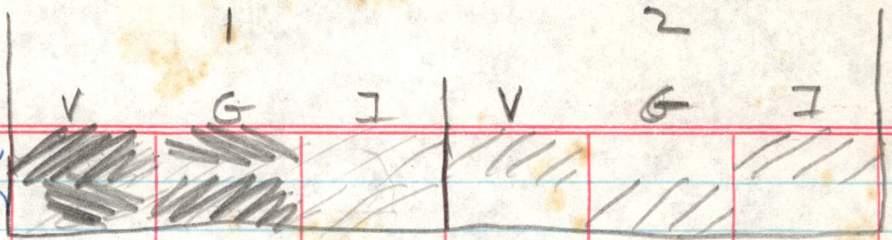
$$\bar{R}^2 = .46$$

$$F_{req'd @ .01} \approx 2.50$$

EIGHT HAMLET CLASSES				REGRESSION COEFFICIENTS OF STANDARDIZED VARIABLES						
	$D_1$	$D_2$	$D_3$	CONST.	$u_1$	$u_2$	$u_3$	$u_4$	$u_5$	$u_6$
1	0	0	0	2.02	1.00	.63	0	-.28	-.35	.19
2	0	0	1	2.35	1.00	.63	0	-.28	-.35	.19
3	0	1	0	2.63	1.00	.63	-.44	-.28	-.35	.19
4	0	1	1	2.96	1.00	.63	-.44	-.28	-.35	.19
5	1	0	0	2.34	.23	-.26	0	-.28	-.35	.19
6	1	0	1	2.67	.23	-.26	0	-.28	-.35	.19
7	1	1	0	2.95	.23	-.26	-.44	-.28	-.35	.19
8	1	1	1	3.28	.23	-.26	-.44	-.28	-.35	.19



cover  
no cover

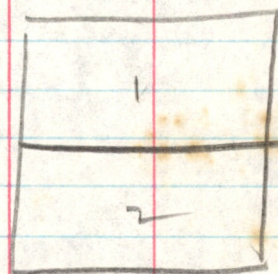




opportunity to support  
ind. incl. pref.

A	R	N
A	R	I

		opportunity			
		A	R	N	<sup>R A</sup> Both
ind.	A	+	+	+	+
indiv.	R				
pref.	I				



terrain	cor	no cor
pop	V	G
section	1	2

